

Shallow-Mesa Structure for Planar PIN and APD Photodiodes

Abstract of the Disclosure

In one aspect the invention relates to a high bandwidth shallow mesa semiconductor photodiode responsive to incident electromagnetic radiation. The photodiode includes an absorption narrow bandgap layer, a wide bandgap layer disposed substantially adjacent to the absorption layer, a first doped layer having a first conductivity type disposed substantially adjacent to the wide bandgap layer, and a passivation region disposed substantially adjacent to the wide bandgap layer and the first doped layer.